

CLAIMS

What we claim is:

1. A method of dewrinkling and providing rewrinkling resistance to a fabric

comprising the steps of

a) providing a target fabric;

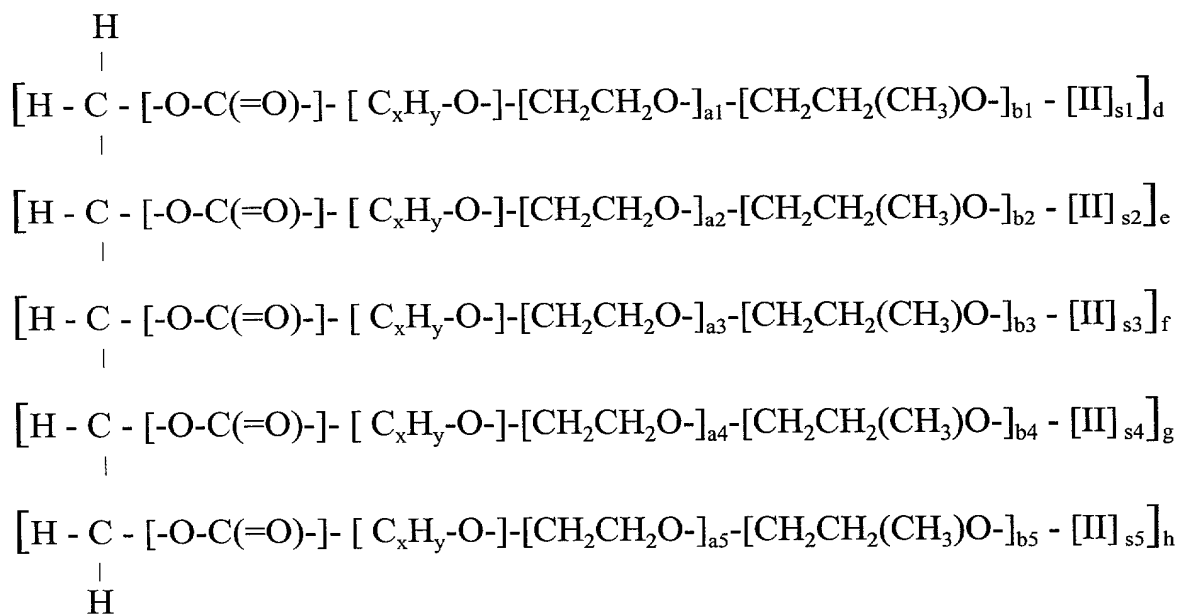
b) spray-contacting said target fabric of step "a" with a composition comprising water and a fiber lubricant/plasticizer;

wherein said fiber lubricant/plasticizer is selected from the group consisting of high density polyolefin waxes, at least one compound that conforms with the following

Formula (A)

at least one compound that conforms with the following Formula (A)

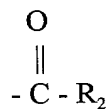
(A)



wherein $d = f = h = 1$; $e = 0$ or 1 ; $g = 0$ or 1 ; $2 \leq x \leq 20$; $(2x-4) \leq y \leq 2x$; and

$$\Sigma a_i \geq 8 \quad \text{and} \quad \frac{\Sigma a_i(44)}{\Sigma a_i(44) + \Sigma b_i(56)} \geq 0.6;$$

wherein structure [II] is H, CH₃, or



wherein R₂ = C_pH_q such that 1 ≤ p ≤ 20, 2p - 3 ≤ q ≤ 2p + 1, and s_i = 0 or 1;

at least one compound that conforms with the following Formula (B)

(B)

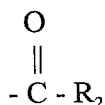


wherein structure [I] is H, CH₃O, or R₁(O)_c;

wherein R₁ = C_nH_m, and 2 ≤ n ≤ 20, (2n - 4) ≤ m ≤ 2n + 1, 1 ≤ c ≤ 5, and

$$\Sigma a_i \geq 8, \quad \text{and} \quad \frac{\Sigma a_i(44)}{\Sigma a_i(44) + \Sigma b_i(56)} \geq 0.6;$$

wherein and Structure [II] is H, CH₃, or



wherein R₂ = C_pH_q such that 1 ≤ p ≤ 20, 2p - 3 ≤ q ≤ 2p + 1, and s_i = 0 or 1;

wherein when Structure I is not H or CH₃, or Structure II is not H or CH₃, then 1 ≤ i ≤ c

$$\Sigma a_i \geq 8 \quad \text{and} \quad \frac{\Sigma a_i(44)}{\Sigma a_i(44) + \Sigma b_i(56)} \geq 0.6; \quad \text{wherein when Structure I is H or}$$

CH₃O and Structure II is H, then i = 1 and a(44) + b(56) ≥ 8000 and

$$\frac{a(44)}{a(44) + b(56)} \geq 0.6;$$

and any mixtures thereof.

2. The method of Claim 2 wherein said fiber lubricant/plasticizer exhibits a HLB of greater than or equal to 8.0.
3. The method of Claim 1 wherein said fiber lubricant/plasticizer is a high density polyolefin wax.
4. The method of Claim 2 wherein said fiber lubricant/plasticizer is selected from the group consisting of alkoxyated fatty acid esters, alkoxyated fatty acid esters, polyoxyalkylene waxes, emulsified high density polyethylenes, alkoxyated alcohols, blends of any such compounds with salts, and any mixtures thereof
5. The method of Claim 4 wherein said fiber lubricant/plasticizer is ethoxylated castor oil.
6. A fabric treated in accordance with the method of Claim 1.
7. A fabric treated in accordance with the method of Claim 2.
8. A fabric treated in accordance with the method of Claim 3.
9. A fabric treated in accordance with the method of Claim 4.

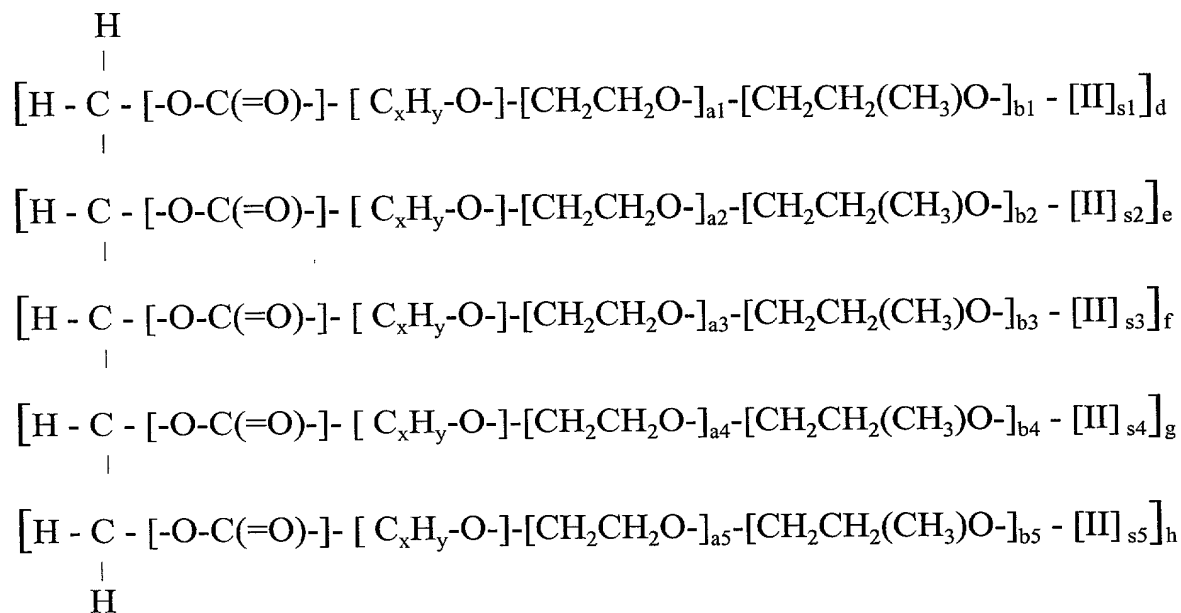
10. A fabric treated in accordance with the method of Claim 5.

11. A method of dewrinkling and providing rewrinkling resistance to a fabric comprising the steps of

a) providing a target fabric;

b) spray-contacting said target fabric of step "a" with a non-film forming composition comprising water and a fiber lubricant/plasticizer; wherein said fiber lubricant/plasticizer is selected from the group consisting of high density polyolefin waxes, at least one compound that conforms with the following Formula (A)

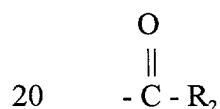
(A)



wherein $d = f = h = 1$; $e = 0$ or 1 ; $g = 0$ or 1 ; $2 \leq x \leq 20$; $(2x-4) \leq y \leq 2x$; and

$$\Sigma a_i \geq 8 \quad \text{and} \quad \frac{\Sigma a_i (44)}{\Sigma a_i (44) + \Sigma b_i (56)} \geq 0.6;$$

wherein structure [II] is H, CH₃, or



wherein $R_2 = C_pH_q$ such that $1 \leq p \leq 20$, $2p-3 \leq q \leq 2p+1$, and $s_i = 0$ or 1 ;

at least one compound that conforms with the following Formula (B)

(B)

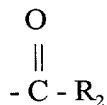


wherein structure [I] is H , CH_3O , or $R_1(O)_c$;

wherein $R_1 = C_nH_m$, and $2 \leq n \leq 20$, $(2n-4) \leq m \leq 2n+1$, $1 \leq c \leq 5$, and

$$\Sigma a_i \geq 8, \text{ and } \frac{\Sigma a_i(44)}{\Sigma a_i(44) + \Sigma b_i(56)} \geq 0.6;$$

wherein and Structure [II] is H, CH_3 , or



wherein $R_2 = C_pH_q$ such that $1 \leq p \leq 20$, $2p-3 \leq q \leq 2p+1$, and $s_i = 0$ or 1 ;

wherein when Structure I is not H or CH_3 , or Structure II is not H or CH_3 , then $1 \leq i \leq c$

$$\Sigma a_i \geq 8 \text{ and } \frac{\Sigma a_i(44)}{\Sigma a_i(44) + \Sigma b_i(56)} \geq 0.6; \text{ wherein when Structure I is H or}$$

CH_3O and Structure II is H, then $i = 1$ and $a(44) + b(56) \geq 8000$ and

$$\frac{a(44)}{a(44) + b(56)} \geq 0.6;$$

and any mixtures thereof.

12. The method of Claim 11 wherein said fiber lubricant/plasticizer exhibits a HLB of greater than or equal to 8.0.
13. The method of Claim 11 wherein said fiber lubricant/plasticizer is a high density polyolefin wax.
14. The method of Claim 12 wherein said fiber lubricant/plasticizer is selected from the group consisting of alkoxylated fatty acid esters, alkoxylated fatty acid esters, polyoxyalkylene waxes, emulsified high density polyethylenes, alkoxylated alcohols, blends of any such compounds with salts, and any mixtures thereof
15. The method of Claim 14 wherein said fiber lubricant/plasticizer is ethoxylated castor oil.
16. A fabric treated in accordance with the method of Claim 11.
17. A fabric treated in accordance with the method of Claim 12.
18. A fabric treated in accordance with the method of Claim 13.
19. A fabric treated in accordance with the method of Claim 14.
20. A fabric treated in accordance with the method of Claim 15.